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Operations and Services

MARINE AND COASTAL WEATHER SERVICES, NWSPD 10-3

MARINE AND COASTAL SERVICES ABBREVIATIONS AND DEFINITIONS

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Signed

April 4, 2002

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Date

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1. Allowed Abbreviations. The following have been agreed to by the NWS and the USCG for use in marine forecast texts.

Day of Week = SUN, MON, TUE, WED, THU, FRI, SAT

Months = JAN, FEB, MAR, APR, MAY, JUN,
JUL, AUG, SEP, OCT, NOV, DEC

Direction = N, NE, E, SE, S, SW, W, NW

Latitude/Longitude = N, S, E, W (e.g., 35N 75W)

Atlantic = ATLC	Average = AVG	Degree = DEG
Fathom(s) = FM	Foot/Feet = FT	Knot(s) = KT
Latitude = LAT	Longitude = LONG	Millibar(s) = MB
Nautical Mile(s) = NM	Pacific = PAC	Pressure = PRES
Position = PSN	Thunderstorm = TSTM	Visibility = VSBY

2. Definitions.

Advisory: A headline indicator to emphasize that a weather event significant to small craft mariners or marine operations is occurring or is possible.

Brisk Wind Advisory: A small craft advisory issued for ice-covered waters.

Coastal Waters Forecast (CWF): The marine forecast for areas, including bays, harbors, and sounds, from a line approximating the mean high water mark (average height of high water over a 19-year period) along the mainland or near shore islands extending out to as much as 100 NM.

Combined Seas: Generally referred to as SEAS. Used to describe the combination or interaction of wind waves and swell in which the separate components are not distinguished. This includes the case when swell is negligible or is not considered in describing sea state. Specifically, $SEAS = \sqrt{(S^2 + W^2)}$

where S is the height of the swell and W is the height of the wind wave. When used, SEAS should be considered as being the same as the significant wave height.

Complex Gale/Storm: In the high seas and offshore forecasts, an area for which gale/storm force winds are forecast or are occurring but for which no single center is the principal generator of these winds.

Continental Shelf (CONSHELF): The zone bordering a continent and extending to a depth, usually around 100 FM (600 FT), from which there is a steep descent toward greater depth.

Continental Slope: The area of descent from the edge of the continental shelf into greater depth.

Dense (or Heavy) Fog: Per World Meteorological Organization (WMO) definition, fog restricting visibility to 1 NM or less.

Developing Gale/Storm: In the high seas and offshore forecasts, a headline used in the warnings section to indicate that gale/storm force winds are not now occurring but are expected before the end of the forecast period.

Expiration time: The time noted in the communication's header at which the product is no longer in effect and should have been removed from the communication system.

Fathom: A unit of water depth equal to 6 FT.

Fetch: The across water distance over which waves are generated by winds having an approximately constant direction and speed.

Freezing Spray: An accumulation of freezing water droplets on a vessel at a rate of less than 2 centimeters (cm) per hour caused by some appropriate combination of cold water, wind, cold air temperature, and vessel movement.

Gale Warning: A warning of sustained winds or frequent gusts from 34 to 47 KT inclusive, predicted or occurring, not generated by a tropical cyclone.

Great Lakes Faxback: A dissemination system housed at Weather Forecast Office (WFO) Cleveland by which Great Lakes customers request and receive hard copies of selected marine products.

Great Lakes Marine Alert Message (MAW): A message generated whenever storm force or greater winds are included in any open lakes forecast.

Great Lakes Marine Forecast (MAFOR): A coded version appended to each of the Great Lakes open lakes forecasts.

Great Lakes Marine Monitoring (MARMON): An automated program housed at WFO Cleveland which compares observations with concurrent MAFORs and provides notification of significant differences to appropriate Great Lakes WFOs.

Great Lakes Storm Summary: A message providing updated information whenever a storm warning is in effect on any of the Great Lakes.

Great Lakes Weather Broadcast (LAWEB): An observation summary prepared to provide Great Lakes mariners with a listing of weather observations along or on the Lakes.

Gust: A fluctuation of the mean wind speed with variations of 10 KT or more between peaks and lulls. Gusts should usually not be included in the forecasts with wind speeds below 10 KTs.

Hague Line: The North Atlantic boundary between the U.S. and Canada fishing waters as determined by the World Court (located in The Hague, Netherlands)

Heavy Freezing Spray: An accumulation of freezing water droplets on a vessel at a rate of 2 cm per hour or greater caused by some appropriate combination of cold water, wind, cold air temperature, and vessel movement.

High Seas Forecasts (HSF): Marine forecasts for the major oceans of the world. In this context, major gulfs or seas (e.g., the Gulf of Mexico or the Bering Sea) are included within these forecast areas. Areas of responsibility for the U.S. are determined by international agreements under the auspices of the WMO.

Hurricane (Also known as typhoon in the western Pacific Ocean or cyclone in the Indian Ocean): A tropical cyclone generating sustained winds of 64 KT or greater.

Hurricane Warning: A warning when sustained surface winds of 64 KT or higher associated with a hurricane or typhoon are expected.

Hurricane Force Wind Warning: A warning for sustained winds or frequent gusts of 64 KT or greater, either predicted or occurring, NOT associated with a tropical cyclone.

Issuance time: The time the forecaster transmits the forecast.

Knot: Unit of speed used in navigation, equal to 1 NM per hour or about 1.15 statute miles per hour.

Marine Weather Statement (MWS): A product to provide mariners with details on significant or potentially hazardous conditions not otherwise covered in existing marine warnings and forecasts.

Marine Zone: Specific, defined over-water areas contained in the various NWS marine forecasts. These are the equivalent of "zones" in the public forecast program.

Nautical Mile: Unit of distance, equal to about 1.15 statute miles (length of 1 minute of latitude).

Navigational Teleprinter Exchange (NAVTEX) Forecast: A marine forecast combining various coastal waters and offshore forecasts issued to accommodate the USCG NAVTEX communication system.

Nearshore Waters Forecast (NSH): The seasonal marine forecast for an area of the Great Lakes from a line approximating mean low water datum along the coast or an island, including bays, harbors, and sounds, out to 5 NM.

North Wall: Coast side boundary of the Gulf Stream generally extending northeast from Cape Hatteras where the Gulf Stream turns northeast.

Offshore Waters Forecast (OFF): A marine forecast for that portion of the oceans, gulfs, and seas beyond the coastal waters extending to a specified distance from the coastline, to a specified depth contour, or covering an area defined by specific latitude and longitude points.

Open Lakes Forecast (GLF): The marine forecast for the U.S. waters within a Great Lake not including the waters covered by an existing nearshore waters forecast.

Predominant Wind: The wind that generates (or is expected to generate) the local component of the significant sea conditions across the forecast area. This is the wind included in all marine forecast products.

Rapidly Intensifying: Any maritime cyclone whose central pressure is dropping, or is expected to drop, at a rate of 1 MB per hour for 24 hours.

Rip Currents: Narrow channels of water flowing seaward from the beach through areas of breaking waves.

Sea Ice: Any form of ice found at sea which has originated from the freezing of sea water (sea ice does NOT include superstructure icing). Ice formed from the freezing of the waters of the Great Lakes will be considered the same as sea ice.

Seas: See Combined Seas.

Severe Local Storm Watch: An alert issued for the contiguous U.S. and its adjacent waters of the potential for severe thunderstorms or tornadoes.

Significant Wave Height: The average height (trough to crest) of the one-third highest waves. An experienced observer will most frequently report heights equivalent to the average of the highest one-third of all waves observed.

Small Craft Advisory: An advisory for areas included in a coastal waters forecast and/or included in a nearshore forecast for sustained winds or frequent gusts from 22 to 33 KT inclusive and/or for sea/wave conditions of 10 FT or more. Because of local conditions, regions may modify the lower limits. Also, regions may modify the upper threshold for sea/wave conditions if the sea heights are solely due to long period swell. A small craft advisory may also be issued when sea or lake ice exists that could be hazardous to small boats.

Special Marine Warning (SMW): A warning of potentially hazardous weather conditions usually of short duration (less than 2 hours) producing wind speeds of 34 KT or more affecting areas included in a coastal waters forecast, a nearshore forecast, or an open lakes forecast that is not adequately covered by existing marine warnings.

Storm Warning: A warning of sustained winds or frequent gusts of 48 to 63 KT inclusive not generated by a tropical cyclone.

Sustained Wind: The wind speed obtained in the U.S. by averaging observed values over a period of at least 1 minute.

Surf Zone Forecast (SRF): A routine or event driven forecast geared toward non-boating marine users issued for an area extending from the near-coastal point where waves begin breaking to the high tide point on shore.

Swell: Wind-generated waves that have traveled out of their generating area. Swell characteristically exhibits smoother, more regular and uniform crests and a longer period than wind waves.

Tropical Cyclone: A generic term for a synoptic scale cyclone originating over tropical or subtropical waters with organized convection and definite cyclonic surface wind circulation.

Tropical Depression: A tropical cyclone in which the maximum sustained surface wind is 33 KT or less.

Tropical Storm: A tropical cyclone in which the maximum sustained surface wind ranges from 34 to 63 KT inclusive.

Tropical Storm Warning: A warning when sustained surface winds of 34 to 63 KT inclusive associated with a tropical storm are expected.

Universal Time Coordinated (UTC): The standard international time reference based on the time at 0° longitude (Greenwich Meridian).

Valid Time: That period of time during which a forecast, until it is updated or superceded by a new forecast issuance, is in effect.

Warning Area: The geographic area for which a specific NWS office has for warning and forecast responsibility.

Warning: A headline indicator to emphasize that a weather event hazardous to all mariners or marine operations is occurring or expected to occur.

Waterspout: A rotating column of air over water whose circulation extends to the surface.

Wave Period: Time, in seconds, between the passage of consecutive wave crests past a fixed point.

Wave Spectrum: The distribution of wave energy with respect to wave frequency or period. Wave spectra assist in differentiating between wind waves and swell.

West Wall: The coast side boundary of the Gulf Stream typically south of Cape Hatteras.

Wind Waves: May be referred to as WAVES. Waves generated from the action of wind on the local water surface. On the Great Lakes because swell is not a significant factor, WAVES is used to describe the state of the water.